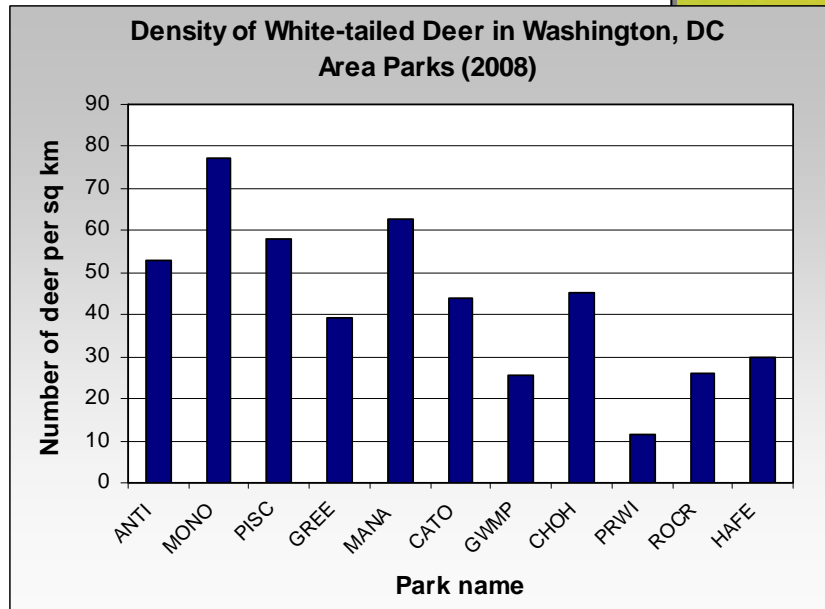


Wildlife biologists don't often find themselves encouraging the public to help reduce the population of a species. Yet scientists and the public alike are starting to recognize that the overpopulation of white-tailed deer is a growing threat to the ecosystems of the United States.

How Did the White-Tailed Deer Population Get So Large?

White-tailed deer were not always a nuisance. In fact, deer almost went extinct early in the 20th century. As a result, state and federal agencies passed laws to increase deer populations. Hunting was limited to certain months of the year. Wildlife reserves were created to protect deer. As natural predators such as wolves and cougars disappeared, the number of deer increased. Suburban and urban areas offered deer a safe place from hunters and good sources of food. In ideal conditions, deer populations can grow quickly. For example, a group of seven deer introduced to an island in Rhode Island grew to a population of 700 in just 27 years.

Obtaining an accurate count of the total number of white-tailed deer in the United States is difficult, but scientists agree that the number is too large. A study of 11 national parks near Washington, D.C., found surprisingly high densities of deer in each park. A density of more than 16 deer per square kilometer is considered a threat to both plant and animal life. Of the 11 parks studied, 10 had densities higher than 16 deer per square kilometer. One park had a density of 77 deer per square



High densities of white-tailed deer in these 11 national parks have negative effects on plant life and other wildlife in the parks.

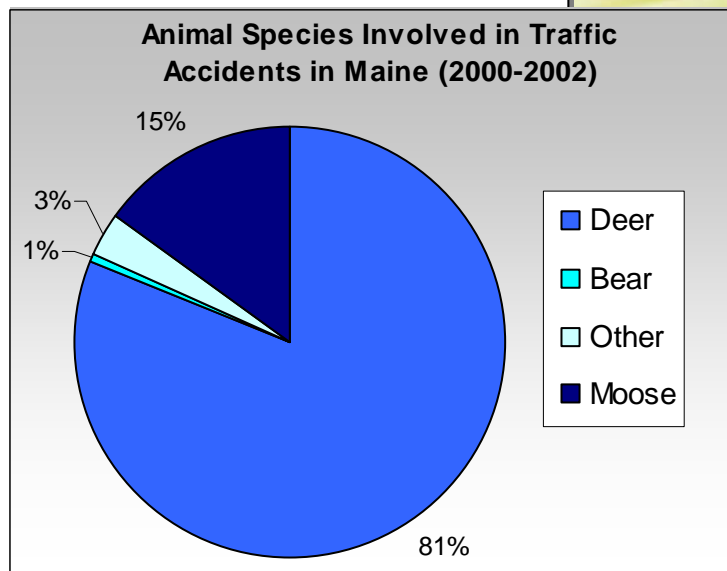
kilometer. Deer have become a problem in rural, suburban, and urban environments.

Why Is Deer Overpopulation a Problem?

Deer can cause damage to plant life by eating plants faster than new plants can grow. Deer particularly like to eat the leaves from young trees and bushes, which kills the plants. When old trees die, fewer young trees remain alive to replace them. Forest floors that should be covered with bushes and young trees are left bare. Birds that would normally nest in the bushes do not have any habitat. Animals that eat the same plants the deer eat are left without food. As native plant species disappear, non-native species move into the empty spaces. Non-native species can harm forest ecosystems by taking resources from native species. Deer are even a threat to themselves. When a population of deer gets too large, all the available food gets eaten and the deer begin to die from starvation.

Deer have also been shown to be threats to sustainable forests. A sustainable forest is one in which enough new trees are planted to replace trees that have been cut down. According to foresters, deer are eating the new trees before the trees can grow. This prevents the forests from growing back and creates additional expenses for the foresters, who must replant the trees.

Deer aren't just nuisances in forests. Deer that have moved into suburban or urban areas will eat plants from gardens, yards, and orchards. Deer carry ticks that can introduce zoonotic diseases—that is, diseases that pass between animals and humans. These ticks may end up on humans or household pets. Deer often wander onto roads and highways that are built close to forest habitats. Deer that try to cross the



Deer and human habitats often overlap, which can result in vehicle crashes and other accidents.

road often cause traffic accidents. The U.S. Department of Transportation (USDOT) estimates that most traffic accidents involving wildlife are due to crashes with deer. Hitting a deer can cause damage to a vehicle or even personal injury. A report from USDOT states that hitting a deer costs a driver about \$1,850 in damages.

What Is the Solution?

There are a several ways to fix the deer overpopulation problem. One option is simply to reduce the number of deer. Some states have expanded the deer hunting season or allowed hunters to kill more deer than in the past. Some wildlife agencies have hired sharpshooters to kill deer. Hunting and sharpshooting are effective, but these solutions can be risky in urban or suburban areas where deer and humans both use natural spaces. Killing deer can also be unpopular with the public. Some agencies find themselves facing protests from individuals and animal welfare organizations.

A more humane option is to try to prevent deer from breeding. One company has made a substance that blocks breeding hormones in deer. The substance has to be injected, and deer have to be caught in order to be treated. The substance works for up to 5 years. So far, only a few states are using this product. Another humane option is to build fences to keep deer out of certain areas. Unfortunately, fences can prevent the movement of other animals that need to pass through. Fences also cost money to build.

Wildlife biologists continue to search for humane solutions that will reduce the harmful impact of deer on ecosystems. The population growth in white-tailed deer is a good example of how an imbalance in the ecosystem has far-reaching effects in both the natural and human worlds.



Some areas attempt to reduce deer populations by expanding hunting season or hiring sharpshooters.